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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,591	09/30/2003	Dean H. Fletcher	249212021400	7997
25226	7590	11/16/2005	EXAMINER	
MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018			LEE, SEUNG H	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EJC

**Office Action Summary**

Application No.

10/676,591

Applicant(s)

FLETCHER, DEAN H.

Examiner

Seung H. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27, 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Receipt is acknowledged of the response filed on 23 August 2005, which has been entered in the file.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-6, 9-14, 17- 20, 22-24, 27, 29, 30, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilson (US 6,213,705, cited by applicant).

Wilson teaches a tape storage library system comprising a gripper or robot arm (22) for store/retrieve a tape from a slot (30) in the library storage wherein the storage apparatus comprises an optical source (34) such as LEDs for generating light that is directed to the expected position or the slot of magazine (32) or a storage device for holding the tape, a proximity sensor (48) for detecting light, a processor (62) serving as a controller for determining the presence of the tape based on the magnitude threshold or a frequency components from the sensor, that is, the proximity sensor determines the presence/absence of the tape cartridge by determining the magnitude of reflected optical signal (e.g., the tape cartridge is presence if reflected optical signal is above predetermined magnitude threshold and the tape cartridge is absence if reflected optical signal is below predetermined magnitude threshold), a camera (40) for reading the label

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(42) attached to the tape such as a barcode wherein the camera comprises CCD chips or a linear scanner (see Figs. 1-7; col. 2, line 50- col. 3, line 34; col. 4, line 62- col. 6, line 52).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 21, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Lignoul (US 6,374,145).

The teachings of Wilson have been discussed above.

Although, Wilson teaches the tape library storage system comprise a proximity sensor and a camera for detecting the presence of storage device and reading barcodes affixed thereon using the linear sensor, he fails to particularly teach or fairly suggest that the library system comprises an area sensor.

However, Lignoul teaches a multidimensional sensor is a CCD image sensor that used also as a proximity sensor by using with a control logic program (115) (figs. 1 and 5; col. 5, lines 8-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Lignoul to the teachings of Wilson in

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order to provide an improved system by utilizing the CCD camera as a proximity sensor by combining the proximity sensor with the image sensor of CCD camera, that is, the single CCD camera can be used for detecting the presence of the tape cartridge and for reading the barcode affixed on the tape.

6. Claims 7, 8, 15, 16, 25, 26, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson.

The teachings of Wilson have been discussed above. In addition to the teachings of Wilson as discussed above, he further teaches that the proximity sensor determined the reflected magnitude threshold in three stages, the optical signal reflected by the tape cartridge stored in the slot, the optical signal reflected by the labeled the tape cartridge stored in the slot, and the optical signal reflected by an empty slot (see col. 5, line 24- col. 6, line 10).

However, Wilson fairly suggest and/or is silent with respect to the library system comprising a sensor having a depth of focus located at the expected position such as the face of the storage device.

But, it would have been an obvious to one of ordinary skill in the art at the time the invention was made to locate the depth of focus of the proximity sensor of Wilson at the face or entry of the slot where the tape cartridge or the labeled tape cartridge located in the storage slot reflect the optical signal above the given threshold to the proximity sensor or the empty slot reflects the optical signal below the given threshold to the proximity sensor wherein reflecting optical signals properly to the proximity sensor

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require to locate a depth of focusing around face or entry of slot of the storage.

Moreover, such modification (i.e., the depth of focus is within plus or minus 1.0 inch from the expected position of a face of the storage device) would have been an obvious to one of ordinary skill in the art at the time the invention was made to adjust the depth of focus for reading optical signal reflected from the face or entry point of the storage slot, that is, the method and system of Wilson measures the reflected signal properly and precisely by presetting the depth of focus close to the face or entry point of the storage slot, for example, plus or minus 1.0 inches from the face or entry point of the storage, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

### ***Response to Arguments***

7. Applicant's arguments filed 23 August 2005 have been fully considered but they are not persuasive.

In response to the applicant argument that “...*the determination is based on whether the optical signal reflected by the tape cartridge or empty slot are above or below a given threshold intensity.....This does not disclose or suggest, however, determining the presence/absence of storage device based on “frequency components” of a signal...*” (see page 8, line 13+), the Examiner respectfully disagrees with the applicant wherein the magnitude of the optical signal can be considered as frequency components, in fact, the optical signal such as LED signals of Wilson is inherently

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defined by amplitude, magnitude, frequency, etc. Moreover, the applicant admits that the present invention also use the magnitude of frequency for determine the presence or absence of the cartridge (see paragraph 0034 of specification).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung H. Lee whose telephone number is (571) 272-2401. The examiner can normally be reached on Monday-Friday, 7:30 AM- 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Seung H. Lee  
Art Unit 2876  
November 11, 2005

  
MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
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